

CLAIMS

What is claimed is:

1. A device for changing the angle of rotation of a camshaft (3) relative to a drive wheel driving the camshaft (3) of an internal combustion engine, said device including a hydraulic adjusting arrangement which is effective between the drive wheel (10) and camshaft (3) and is connected to a fluid circuit of the internal combustion engine for admitting fluid to said adjusting arrangement (11) via an on/off valve (5), said camshaft (3) being mounted in camshaft bearings (2), and said on/off valve (5) being at least partially integrated in one of the camshaft bearings (2).
2. A device according to claim 1, wherein the camshaft bearing (2) comprises a bearing shell (2a) and a bearing cover (2b), and said on/off valve (5) is integrated in the bearing cover (2b).
3. A device according to to claim 1, wherein the bearing cover (2b) is an integral part of a cylinder-head cover (4) of the internal combustion engine.
4. A device according to to claim 1, wherein the bearing cover (2b) has a receiving bore (6) in which at least part of the on/off valve (5) is accommodated.
5. A device according to to claim 1, wherein the hydraulic adjusting arrangement is supplied with fluid via fluid-medium bores (7 to 9) arranged in the camshaft bearing (2).

6. A device according to claim 5, wherein the fluid bores (7 to 9) of the camshaft bearing (2) are cast in to said bearing cover (2b).
7. A device according to claim 5, wherein the camshaft bearing (2) has at least one fluid inlet (7) for supplying the on/off valve (5) with fluid, at least one fluid outlet (8) for supplying the hydraulic adjusting arrangement with fluid and at least one fluid return flow (9).
8. A device according to claim 7, wherein the fluid is supplied to the inlet (7) from the cylinder head (1) in order to supply the on/off valve (5) with fluid.
9. A device according to claim 7, wherein the fluid is supplied to the inlet (7) from the cylinder head cover (4) in order to supply the on/off valve (5) with fluid.
10. A device according to claim 7, wherein the fluid is supplied to the inlet (7) from the camshaft (3) in order to supply the on/off valve (5) with fluid.